

'Poor man's tucker' – historic and contemporary consumption of longbum shellfish around Darwin

Patricia Bourke

7 Stedcombe Street, Alawa, NT 0810, Australia.

Email: bourkep@hotmail.com

Abstract

This paper describes archaeological and ethnographic observations of the remains – scatters of shells of mostly *Telescopium telescopium* plus several *Terebralia* species – of historic and contemporary consumption of longbum shellfish (Mollusca: Potamididae) by Aboriginal people around Darwin.

Introduction

In his 2013 paper on ways to distinguish between northern Australian species of Potamididae, Richard Willan noted that coastal Aboriginal people regularly ate the gastropod shellfish *Telescopium telescopium*, colloquially known, along with other *Terebralia* species of the family, as longbum. A less-used local Larrakia language name for them is *Danijarra* (Lorraine Williams, pers. comm.). Willan (2013) reported from an ethnographic study (Mechan 1982) that longbums are consumed after light roasting, steaming or boiling, and sometimes are used as bait. However, they were never a dietary staple as were bivalves, possibly because of their low protein content or peppery taste (for the several *Terebralia* species) that increases the desire for drinking.

This paper describes archaeological and ethnographic observations of historic and contemporary consumption of longbums by Aboriginal people around Darwin. The remains of this consumption – scatters of shells of mostly *Telescopium telescopium* plus several *Terebralia* species – have been noted during fieldwork since the mid-1990s by the author along with members of the Larrakia community (Bourke 2002, 2005a,b,c, 2012; Bourke & Williams 2005). That research, which was focussed on hundreds of large mounds of shells dotted around Darwin Harbour, showed that longbums have been part of the diet of Aboriginal people for thousands of years. The shells of *Telescopium* and *Terebralia* species of longbum are present in small proportions (0.1–5%) in those Aboriginal shell mounds, which are dominated by the open mudflat Roughback Cockle (*Anadara granosa*), and which radiocarbon dating shows were deposited in the period 2000–500 years ago (Bourke 2004, Brockwell *et al.* 2009).

Table 1. Recorded scatter sites dominated by longbums around Darwin Harbour (HI = Hope Inlet, GP = Glyde Point, EA = East Arm, WIN = Winnellie, P = Palmerston, MA = Middle Arm, V = Virginia).

Site	Area (m)	Description
HI49	6x6	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> shells on saltflats around mangrove-lined creeks
HI57	1x1	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> shells & stone axe on cracking clay saltflats
HI128	50x20	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> , <i>Anadara granosa</i> , <i>Cerithidea</i> sp., <i>Cassidula angulata</i> shells & stone artefact scatter on cracking clay saltflats
HI129	18x11	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> , <i>Geloina coxans</i> , <i>Chicoreus capucinus</i> , <i>Volema cochlidium</i> , <i>Cassidula angulata</i> shells & stone artefact scatter on cracking clay saltflats
HI137	40x20	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> , <i>Anadara granosa</i> , <i>Volema cochlidium</i> shells & stone artefact scatter on cracking clay saltflats
HI138	20x20	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> , <i>Anadara granosa</i> , <i>Volema cochlidium</i> , <i>Nerita</i> sp., <i>Cerithidea</i> sp., <i>Geloina coxans</i> , <i>Ellobium aurisjudae</i> shells on saltflats around mangrove-lined creeks
HI139	30x10	Mainly <i>Terebralia</i> sp., some <i>Telescopium telescopium</i> , <i>Anadara granosa</i> , <i>Cerithidea</i> sp., shells & stone artefact scatter on cracking clay saltflats
HI150	1x1	<i>Telescopium telescopium</i> shell scatter on creek bank
GP8	3x3	<i>Telescopium telescopium</i> shell scatter on beach ridge adjacent to mangroves
GP9	30x30	<i>Telescopium telescopium</i> shell scatter on creek bank
GP10	17x20	Mainly <i>Telescopium telescopium</i> , some <i>Volema cochlidium</i> , <i>Terebralia</i> sp., <i>Syrinx arianus</i> shell scatter in woodland
EA5	10x10	Mainly <i>Telescopium telescopium</i> , some <i>Geloina coxans</i> , <i>Terebralia</i> sp., <i>Chicoreus capucinus</i> , <i>Volema cochlidium</i> , <i>Nerita</i> sp. shell and World War II historic items on low ridge adjacent to mangroves
WIN10	6x6	<i>Telescopium telescopium</i> shell scatter overlying buried midden close to mangroves

Continued next page.

Table 1. Continued.

Site	Area (m)	Description
P3	50x50	Stone artefact and <i>Telescopium telescopium</i> shell scatter 35x15 m along mangrove edge, 40 m inland two small (3 m and 5 m diam) scatters of <i>Telescopium telescopium</i>
P5	1x1	Mainly <i>Nerita</i> sp., some <i>Terebralia</i> sp. shell scatter on saltpan between islet and mainland
P6	2(1x1)	Two shell scatters 10 m apart on sandy strip between mangroves and high ground - one <i>Geloina coxans</i> , one <i>Telescopium telescopium</i>
P7	5x5	Scatter of mainly <i>Telescopium telescopium</i> , <i>Geloina coxans</i> , <i>Nerita</i> sp., <i>Terebralia</i> sp., <i>Chicoreus capucinus</i> + old tennis ball + tin lid on raised area of land with shrubby bush overlooking mudflats
P8	1x1	Mainly <i>Telescopium telescopium</i> , <i>Terebralia</i> sp., <i>Nerita</i> sp., in shrubby woodland 200 m inland from mangroves
P11	1x1	Mainly <i>Telescopium telescopium</i> , some oyster shell scatter at mangrove edge
P12	30 Ø	Small scatters of <i>Telescopium telescopium</i> and stone artefacts in 30 m radius near quartz outcrop and swamp
MA51	30x30	Mainly <i>Telescopium telescopium</i> , some <i>Chicoreus capucinus</i> shell and stone artefact scatter on lower slopes at mangrove edge near mouth of Elizabeth River
MA52a	100x30	Mainly <i>Telescopium telescopium</i> shell and stone artefact scatter extending from <i>Anadara granosa</i> mound in woodland 100 m to edge of saltpan strip and mangroves
MA61	60x60	Mainly <i>Telescopium telescopium</i> shell and stone artefact scatter near creek
MA62	30x30	Mainly <i>Telescopium telescopium</i> shell and stone artefact scatter near creek
MA64	20x20	Mainly <i>Telescopium telescopium</i> shell and stone artefact scatter in woodland
MA75	15x15	Mainly <i>Telescopium telescopium</i> shell and stone artefact scatter on laterite platform near mangroves
V24	20x20	Mainly <i>Telescopium telescopium</i> shell and stone artefact scatter in woodland 100 m inland from mangroves

In contrast to the dominance of *Anadara granosa* in thick, stratified shell middens, longbums often dominate in thin scatters of shells on the ground surface. Sites of this type recorded during archaeological surveys range from small 1 m wide scatters to 50 m wide assemblages (Table 1). The larger scatters of shells that cover a wider area may indicate longer and/or repeated episodic use. The presence of stone artefacts in some sites indicates they were deposited prior to European contact. Other sites, associated with the presence of historic items, such as historic bottle glass, metal or ceramics, that show clear evidence of modification for use as Aboriginal implements, may represent the 'contact period' (Bourke 2005b). Very small shell scatters of 1 m in diameter along the shoreline, which contain no stone artefacts, are considered likely to be single consumption episodes of more recent origin (within the last 50 years).

Radiocarbon dating of shells from two *Telescopium*-dominated surface scatters – one small 6 m wide scatter (Site WIN10) and one much larger 100 m wide scatter (Site MA52b) – showed these longbums were consumed around 1900–1930 AD, in the early period of European settlement of Darwin (Bourke 2005b, Table 2). These two scatters are located on the outskirts of Darwin in Charles Darwin National Park and Middle Arm Peninsula, respectively. They occur in association with *Anadara*-dominated shell mounds containing a small proportion of longbum shells, which radiocarbon dating thus far has shown were all formed within the pre-contact period (Bourke & Crassweller 2006). Radiocarbon estimates for *Anadara* shell mound MA52a adjacent to the *Telescopium* scatter MA52b are shown in Table 2.

Table 2. Radiocarbon dates for sites MA52 and WIN10, containing pre- and post-contact longbum remains. (Calibrated at Waikato Radiocarbon Dating laboratory).

Site	Material dated	Code	Radiocarbon age (years)	Calibrated date (68% probability, rounded)
MA52a <i>Anadara</i> shell mound	<i>Anadara granosa</i>	Wk14391	1298 ±40	1120-1240 AD
MA52b <i>Telescopium</i> shell scatter	<i>Telescopium telescopium</i>	Wk14394	344 ±34	1900-1930 AD
WIN10 <i>Telescopium</i> shell scatter overlying buried <i>Anadara</i> mound	<i>Telescopium telescopium</i>	Wk14392	197 ±36	1900-1920 AD

Eating longbums around Darwin in the late 20th and early 21st centuries

Longbums are called 'poor man's tucker' in Territory coastal Aboriginal communities where there is a much greater variety of preferred 'cockles' (i.e. shellfish of the families Arcidae and Veneridae) and 'mussels' (i.e. Cyrenidae) available than occur around Darwin today (Lorraine Williams, pers. comm.), where only very low densities of living *Anadara* 'cockles' have been found (Bourke & Willan 2009). In the present day extensive mangroves of Darwin Harbour, the gastropods *T. telescopium*, *Terebralia palustris*, *T. semistriata* and *Nerita balteata* are the most common edible molluscs (Smith *et al.* 1997; Patricia Bourke & Richard Willan, pers. obs.) available to local Aboriginal people.

Ethnographic fieldwork of contemporary Larrakia resource use around Darwin by the author (Bourke 2002) and others (e.g. Hodgson 1997) described how these longbums and 'periwinkles' (i.e. Neritidae) have historically been collected and consumed by small family groups. Shellfish were no longer collected around urban areas such as Casuarina and Rapid Creek in the 1990s as they were in the 1960s and 1970s, due to worries about pollution. Instead, people sought these resources in areas further away from urban Darwin, around outer Palmerston and Middle Arm.

In the late dry seasons of 1999, 2003 and 2005 during field trips (Bourke 2002, 2005a) Larrakia women collected longbums on Middle Arm peninsula. In one field trip a small mudflat area on the southern shoreline of the peninsula, wet by rains the previous evening and surrounded by mangroves *Ceriops tagal* and *Avicennia marina*, with *Rhizophora stylosa* seaward, was identified by the women as a place to collect bush tucker, in particular the longbum *Telescopium telescopium*. Three species of gastropod were collected: *T. telescopium*, *Terebralia* spp. (either or both *T. palustris* and *T. semistriata*), plus *Nerita balteata*. *Telescopium telescopium* is favoured over the species of *Terebralia*, which have a peppery aftertaste (Lorraine Williams, pers. comm.). While walking through the mangroves, large specimens of the numerous *T. telescopium* were picked up easily from the mud around the mangrove roots and placed in 4 L plastic buckets and crates (Figures 1 and 2). Some of the *T. telescopium* appeared to be mating, and it was discussed that this may not be the best time to collect them.

Before collecting, mangrove wood was used to light a fire for a cup of tea and to make coals to cook the shellfish. The longbums were cooked in the coals, and the cooked longbums placed on a layer of paperbark, twigs and leaves to cool (Figure 3). Once cool, the ends of the shell were broken off and the flesh pulled out. Before eating them, the green upper section of *T. telescopium* (i.e. digestive gland plus gonad) was removed as this was said to cause stomach ache, and it acts as a laxative if eaten in large quantities (Lorraine Williams, pers. comm.) (Figure 4).



Figure 1. Live longbums (*Telescopium telescopium*) on the mud around mangrove roots. (Lorraine Williams)

Figure 2. Live collected longbums (*Telescopium telescopium*) in 4 L plastic buckets and crates. (Lorraine Williams)

Figure 3. Longbums being cooked in coals, and cooked longbums on paperbark. (Lorraine Williams)

Figure 4. Longbum flesh after removal from the shell, showing green membrane. (Lorraine Williams)



Figure 5. Historic scatter of shell remains from consumed longbums near mangroves outside Palmerston. (Lorraine Williams)

The way in which the gastropod shells were broken on our field trip with the posterior end of the spire removed, was similar to that observed in customary methods of extracting flesh by Arnhem Land coastal people during Meehan's (1982: 86–89, 105–109) ethnographic work in the 1970s. Sometimes the shell stays whole if the meat is exposed after cooking and can be extracted with a sharp stick, or it explodes out of the shell at high pressure (Lorraine Williams, pers. comm.). The shell remains from these contemporary field trips are comparable to the whole and broken shells found in historic scatters (Figure 5) and pre-contact stratified shell mounds along the Darwin Harbour shoreline. They attest to the long history of consumption of longbums as a small but ever-present part of the diet of Aboriginal people of the Northern Territory coast. In more recent times longbums have become the dominant species collected since environmental change some 500 years ago saw the decline of the shell beds that produced the preferred Roughback Cockle (*Anadara granosa*) (see Hiscock 1997; Brockwell *et al.* 2013).

Acknowledgements

I would like to thank the Larrakia community with whom I worked while collecting the data that forms the basis of this paper, and in particular Lorraine Williams, for her invaluable ecological knowledge and skills in photography. Thanks also to reviewer Dr Sally Brockwell for constructive comments.

References

- Bourke P. (2002) *Larrakia ethno-archaeology report*. Unpublished report for the Northern Land Council, Darwin.
- Bourke P. (2004) Three Aboriginal shell mounds at Hope Inlet: evidence for coastal, not maritime Late Holocene economies on the Beagle Gulf mainland, northern Australia. *Australian Archaeology* 59, 10–22.
- Bourke P. (2005a) *Archaeological survey for Indigenous cultural heritage sites around Darwin Harbour*. Unpublished report to Heritage Conservation Services, held at Heritage Branch, Darwin.
- Bourke P.M. (2005b) Identifying Aboriginal “contact period” sites around Darwin: long past due for Native Title? *Australian Aboriginal Studies* 1, 54–65.
- Bourke P. (2005c) Archaeology of shell mounds of the Darwin coast: totems of an ancestral landscape. In: *Darwin Archaeology: Aboriginal, Asian and European Heritage of Australia's Top End* (eds Bourke, P., Brockwell S. and Fredericksen C.), pp. 29–48. Charles Darwin University Press, Darwin.
- Bourke P. (2012) *Late Holocene indigenous economies of the tropical Australian coast: an archaeological study of the Darwin Region*. British Archaeological Reports (B.A.R S2340), Oxford.
- Bourke P. and Crassweller C. (2006) Radiocarbon dates from middens around Darwin Harbour: cultural chronology of a pre-European landscape. *Australian Aboriginal Studies* 2, 116–119.
- Bourke P.M. and Willan R.C. (2009) *Anadara granosa* (Mollusca: Bivalvia: Arcidae) discovered live in Darwin Harbour, with implications for understanding climate change in northern Australia. *The Beagle* 25, 115–118.
- Bourke P. and Williams L. (2005) *Indigenous cultural heritage at Charles Darwin National Park: assessing values and conservation needs vs market appeal*. Unpublished ARC-Linkage report held at Heritage Branch, Darwin.
- Brockwell S. *et al.* (2009) Radiocarbon dates from the Top End: a cultural chronology for the Northern Territory coastal plains. *Australian Aboriginal Studies* 1, 54–76.
- Brockwell S. *et al.* (2013) Late Holocene climate change and human behavioural variability in the coastal wet-dry tropics of northern Australia: Evidence from a pilot study of oxygen isotopes in marine bivalve shells from archaeological sites. *Australian Archaeology* 76, 21–33.
- Hiscock P. (1997) Archaeological evidence for environmental change in Darwin Harbour. In: *The Marine Flora and Fauna of Darwin Harbour, Northern Territory, Australia. Proceedings of the Sixth International Marine Biological Workshop*. (eds Hanley J.R., Caswell G., Megirian D. and Larson H.K.), pp. 445–459. Museums and Art Galleries of the Northern Territory and the Marine Sciences Association, Darwin.
- Hodgson R. (1997) *Aboriginal Use of Natural Resources in the Darwin Region – Past and Present*. Unpublished Report to the Australian Heritage Commission.
- Meehan B. (1982) *Shell Bed to Shell Midden*. Australian Institute of Aboriginal Studies, Canberra.

- Smith A.N., Hanley J.R. and Love B. (1997) Comparisons of different quadrat sizes for measuring the densities of crabs and macromolluscs of the mangrove forest floor. In *The Marine Flora and Fauna of Darwin Harbour, Northern Territory, Australia. Proceedings of the Sixth International Marine Biological Workshop*. (eds Hanley J.R., Caswell G., Megirian D. and Larson H.K.), pp. 461–466. Museums and Art Galleries of the Northern Territory and the Marine Sciences Association, Darwin.
- Willan R.C. (2013) A key to the potamidid snails (longbums, mudcreepers and treecreepers) of northern Australia. *Northern Territory Naturalist* 24, 68–80.
-